F.1
12/16/02

December 16, 2002

Mr. Thomas Cook
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Subject: **Letter Report**
Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Mundelein, Lake County, Illinois
Technical Direction Document No. S05-0207-005
Tetra Tech Contract No. 68-W-00-129

Dear Mr. Cook:

T N & Associates, Inc. (TN&A), a subcontractor for the Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START), is submitting the enclosed letter report for the Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) site in Mundelein, Illinois. If you have any questions or comments regarding the report or need additional copies, please contact me at (312) 220-7000 or Thomas Kouris at (312) 946-6431.

Sincerely,

Raghu Nagam

Raghu Nagam
for Jeanine Solinski
TN&A START Project Manager

Enclosure

cc: Lorraine Kosik, START Project Officer
Thomas Kouris, START Program Manager
Raghu Nagam, TN&A START Manager

LETTER REPORT
ROUTES 45 & 60 EMERGENCY RESPONSE SITE
(MUNDELEIN ILLEGAL DUMPING SITE)
MUNDELEIN, LAKE COUNTY, ILLINOIS

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 5 Emergency Response Branch
77 West Jackson Boulevard
Chicago, IL 60604

TDD No.:	S05-0207-005
Date Prepared:	December 16, 2002
Contract No.:	68-W-00-129
Prepared by:	T N & Associates, Inc.
START Project Manager:	Raghu Nagam
Telephone No.:	(312) 220-7000
U.S. EPA On-Scene Coordinator:	Thomas Cook
Telephone No.:	(312) 886-7182

T N & Associates, Inc.
Engineering and Science

CONTENTS

FIGURES

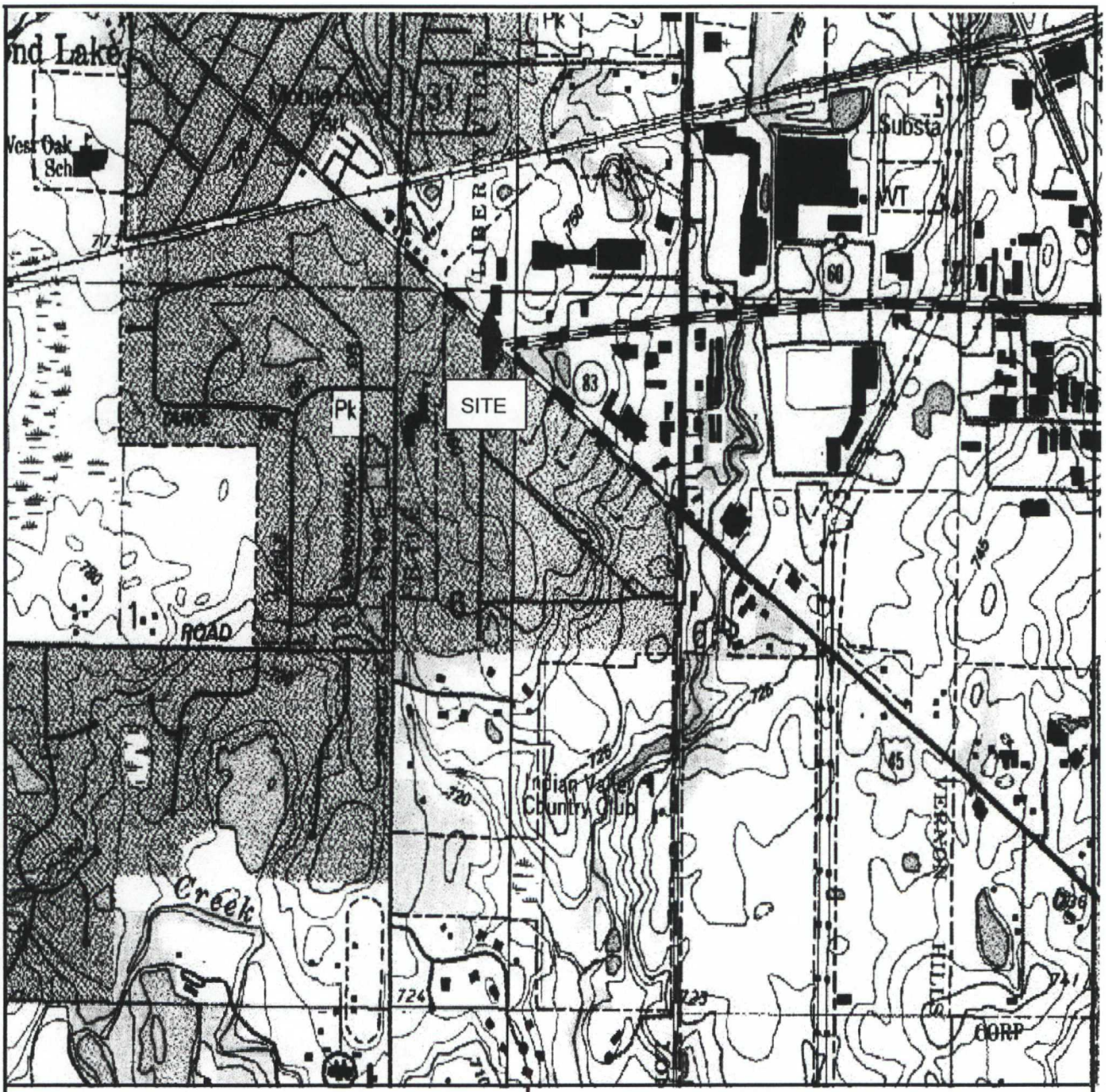
1.0 INTRODUCTION

T N & Associates, Inc. (TN&A), a subcontractor for the Tetra Tech EM Inc. Superfund Technical Assessment and Response Team (START), has prepared this letter report in accordance with the requirements of U.S. Environmental Protection Agency (U.S. EPA) Technical Direction Document (TDD) No. S05-0207-005. The scope of this TDD was to conduct emergency response activities at the Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) site in Mundelein, Lake County, Illinois. START was tasked to prepare a health and safety plan; collect information on the nature, location, and amount of abandoned material on site; develop options for eliminating the threat posed to public health or welfare or the environment; develop health and safety procedures for a response action; conduct air monitoring; conduct abandoned material and spill material sampling; document on-site conditions with written logbook notes and a digital camera; validate analytical data; and prepare this letter report.

This letter report discusses site background information, emergency response activities, analytical results, and waste disposal and summarizes the emergency response. Appendix A contains a photographic log of site activities, and Appendix B contains the validated analytical data package for the samples collected by START.

2.0 SITE BACKGROUND

The Mundelein Illegal Dumping site is located at 360 Townline Road in Mundelein, Lake County, Illinois (see Figure 1). A fruit market is present at this address. Several abandoned drums and buckets were discovered next to the parking lot behind the fruit market. The drums and buckets contained unidentified materials. They were in deteriorated condition, and because they had been left in the open, they were exposed to inclement weather conditions. When the drums were first discovered, several of them were lying on their sides, and some had spilled their contents into the parking lot and the wooded area behind the fruit market. Fire department personnel placed the drums upright (see Figure 2).



0 .25Mi

NORTH

ROUTES 45 & 60 EMERGENCY RESPONSE (MUNDELEIN ILLEGAL DUMPING) SITE

Mundelein, Illinois

FIGURE 1
SITE LOCATION MAP

Source: Modified from TerraServer, USGS Topographic Map for Mundelein, Illinois, 1993

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ORIENTATION: NORTH

ROUTES 45 & 60 EMERGENCY RESPONSE (MUNDELEIN ILLEGAL DUMPING) SITE

Mundelein, Illinois

FIGURE 2
SITE FEATURE PHOTOGRAPH

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3.0 EMERGENCY RESPONSE ACTIVITIES

Emergency response activities for the Mundelein Illegal Dumping site included a site reconnaissance, a drum and bucket inventory, drum and bucket vapor monitoring, drum and bucket sampling, in-field characterization and compatibility testing, compatible waste bulking, and collection of bulked waste samples for disposal characterization. These activities are described below.

On July 10, 2002, U.S. EPA On-Scene Coordinator (OSC) Thomas Cook and START mobilized to the site and met with Illinois Environmental Protection Agency (IEPA) Emergency Responder Edward Osowski. Superior Environmental Services, Inc. (Superior), the Emergency Response Removal Services (ERRS) contractor to U.S. EPA, also mobilized to the site on July 10, 2002, in order to conduct removal activities. START's visual inspection of the site and the abandoned drums and buckets revealed that five 55-gallon drums, four 30-gallon drums, and (14) 5-gallon buckets were present. One of the drums was marked as a dry cleaning solution.

START member Lee Christenson donned Level B personal protective equipment (PPE) and conducted organic vapor monitoring of the drum and bucket contents using a photo ionization detector (PID). The contents of all the drums and buckets appeared to be similar during a visual inspection. The drums were labeled with "D-1" through "D-9" markings, and PID readings were recorded just above their headspace. These PID readings ranged from 92 parts per million (ppm) for D-2 to 1,278 ppm for D-1. START then conducted chemical-specific monitoring of the drums for trichloroethene (TCE) using Draeger tubes. Chemical-specific monitoring results for TCE included 250 ppm for D-1, 150 ppm for D-5, and 80 ppm for D-9.

After drum and bucket content vapor monitoring, START collected a composite liquid sample from D-1 and a 5-gallon bucket. An in-field flammability test and a chlorinated-compound copper wire test performed on the composite sample indicated that it was not flammable but that it might contain chlorinated compounds. Because the test result for chlorinated compounds was positive, the composite sample was hand-delivered to Superiors's laboratory in Milwaukee, Wisconsin, for polychlorinated biphenyl (PCB) analysis.

Following sample collection activities, OSC Cook conferred with IEPA, START, and Superior. The OSC reviewed all the information gathered in the field and recommended that Superior consolidate the drum and bucket contents. Superior then consolidated the liquid contents of all the drums and buckets into three 55-gallon drums. Stained soil around the drums and buckets was excavated using a backhoe mobilized by Superior and was collected in five 55-gallon drums. The solid contents of the drums, buckets, and debris were consolidated in seven 55-gallon drums along with the scrapped drums and buckets themselves. The bulking and consolidation aided in reducing the number of containers that would have to be transported and disposed of at an off-site facility. After consolidation, START collected samples MDL-01 (liquid) and MDS-01 (solid) from two drums for waste characterization and disposal analysis.

Verbal analytical results received by telephone from Superior's laboratory indicated that no PCB contamination was present in the composite sample. After consolidation of the drums and buckets, OSC Cook met with Village of Mundelein Public Works Department officials and discussed storing the 15 drums containing the consolidated materials until their proper disposal could be arranged by U.S. EPA. Superior then transported the 15 drums and staged them at the Public Works Department. At the conclusion of these activities, all remaining personnel demobilized from the site. Appendix A contains photographs taken during emergency response activities.

START hand-delivered samples MDL-01 and MDS-01 to Severn Trent Laboratories in University Park, Illinois, for analysis for total and toxicity characteristic leaching procedure (TCLP) metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, PCBs, reactive cyanide, and reactive sulfide analyses. Ignitability tests were also requested for these samples. START requested a normal turnaround time for the performance of the analyses and reporting of analytical data.

4.0 ANALYTICAL RESULTS

The analytical results for samples MDL-01 and MDS-01 indicated that both contained hazardous waste contamination. Significant contaminant concentrations in MDL-01 included 31 ppm TCE; 110,000 ppm tetrachloroethene; 21 ppm ethylbenzene; 55 ppm m- and o-xylenes, 83 ppm 1,3,5-trimethylbenzene; and 260 ppm butyl benzyl phthalate. Significant contaminant concentrations in solid sample MDS-01 included 22,000 ppm tetrachloroethene; 150 milligrams per liter (mg/L) TCLP tetrachloroethene; 27 ppm butyl benzyl phthalate; and 98 ppm bis(2-ethylhexyl)phthalate. Appendix B contains the validated analytical data package for the samples.

5.0 WASTE DISPOSAL

Based on the analytical results for samples MDL-01 and MDS-01, Superior arranged for the disposal of all 15 drums of consolidated materials. On September 9, 2002, U.S. EPA and Superior mobilized to the Village of Mundelein Public Works Department in order to oversee the transport of the drums. Three drums of hazardous liquid waste were transported by Chemical Disposal Services, Inc., to Pollution Control Industries, Inc., in East Chicago, Indiana, for disposal. Seven drums containing hazardous solid materials and five drums containing excavated hazardous soil were transported by Chemical Disposal Services, Inc., to Clean Harbors Environmental Services, Inc., in Chicago, Illinois, for treatment.

6.0 SUMMARY

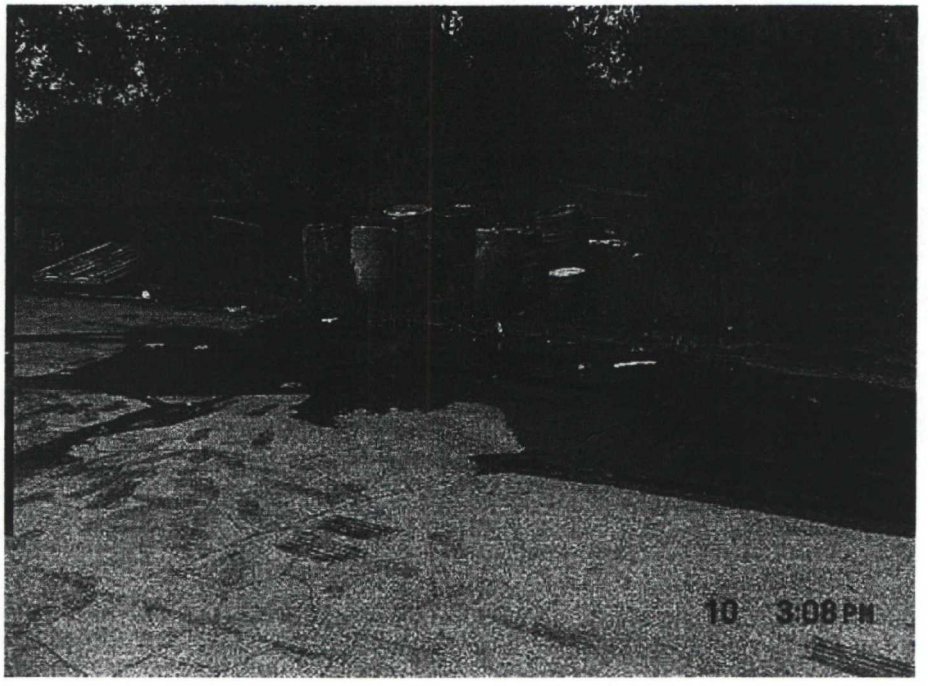
On July 10, 2002, U.S. EPA, START, and the ERRS contractor mobilized to the Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) site at 360 Townline Road in Mundelein, Lake County, Illinois. A total of 23 drums and buckets of unidentified materials had been abandoned at the site. Vapor monitoring and sample analytical results indicated that the drums and buckets contained hazardous constituents. By securing the drums and buckets; conducting proper waste characterization; and directing the disposal of the drums and buckets, their contents, and stained soil at approved facilities, U.S. EPA abated potential threats to human health and the environment. No further action is necessary at the site.

APPENDIX A

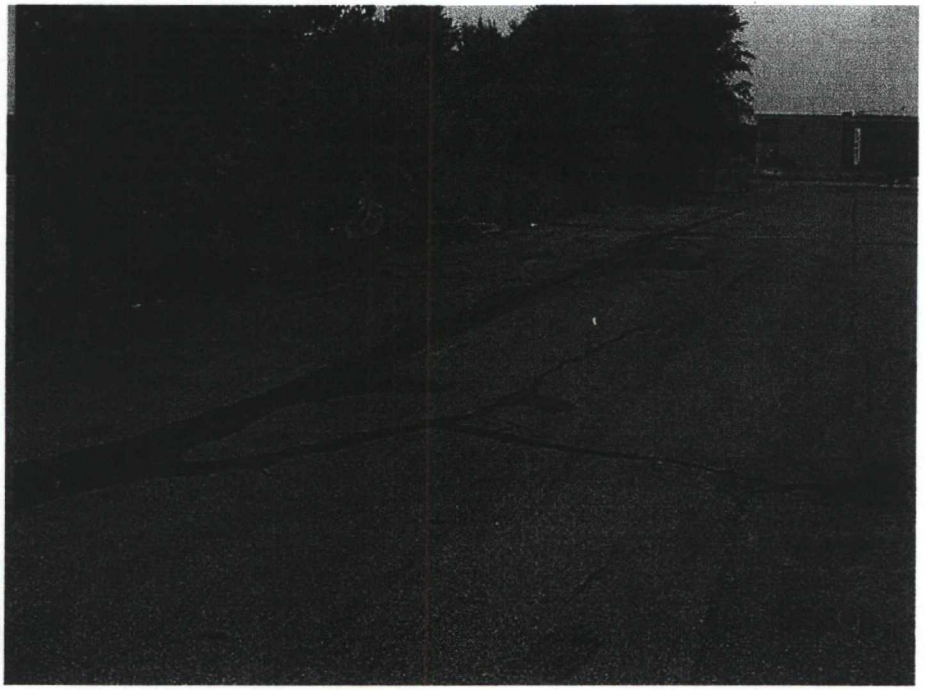
PHOTOGRAPHIC LOG

(Six Sheets)

Photograph No.: 1 **Orientation:** North
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Abandoned drums and buckets

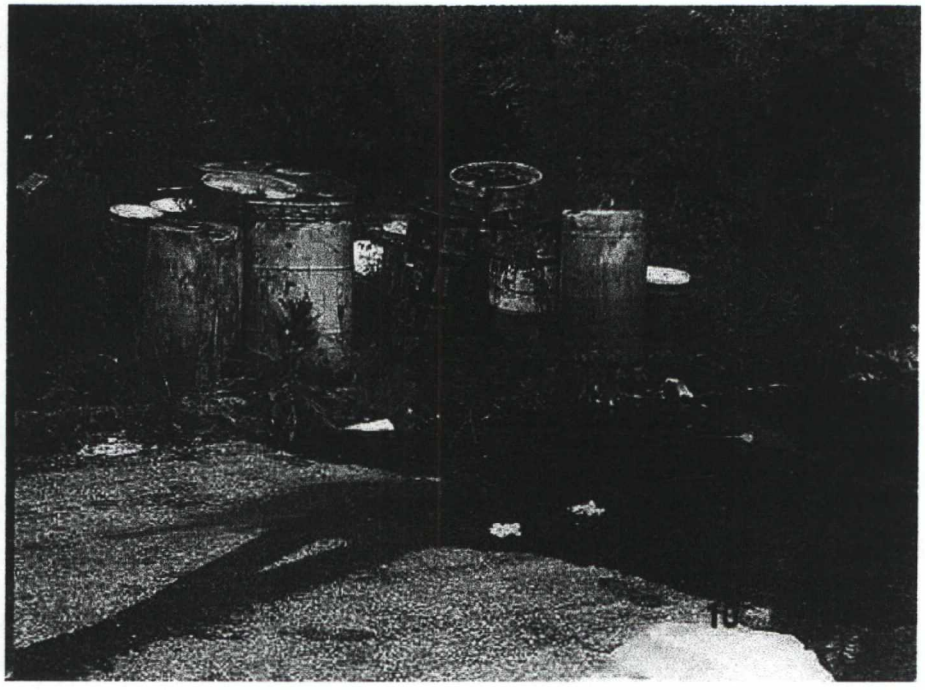


Photograph No.: 2 **Orientation:** Northwest
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Abandoned drums and buckets

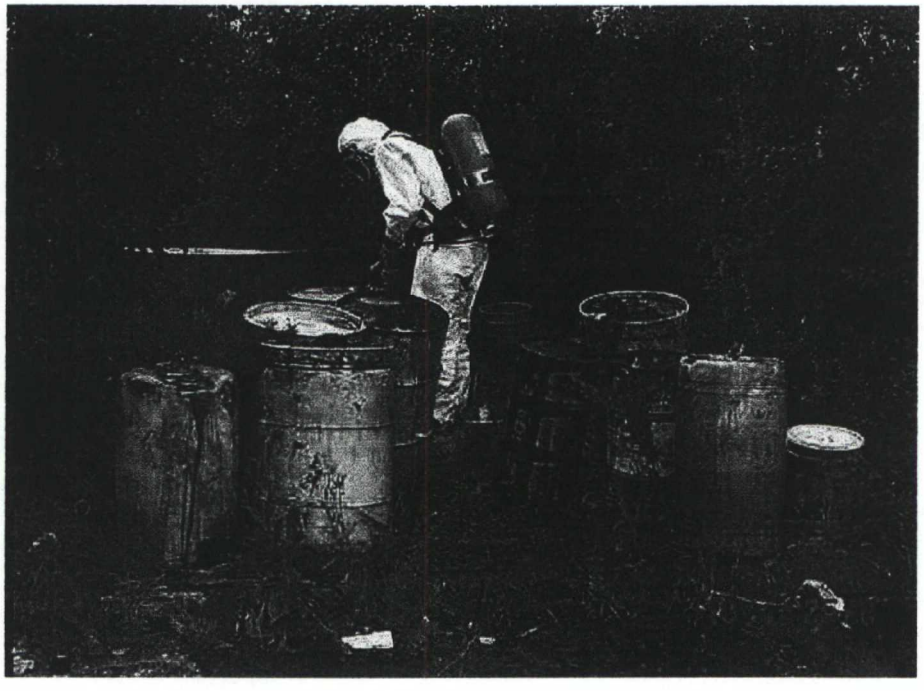


Photograph No.: 3 **Orientation:** Northeast
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Liquid waste flowing away from drum and bucket location

Photograph No.: 4 **Orientation:** Northeast
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Booms placed to contain liquid waste spill

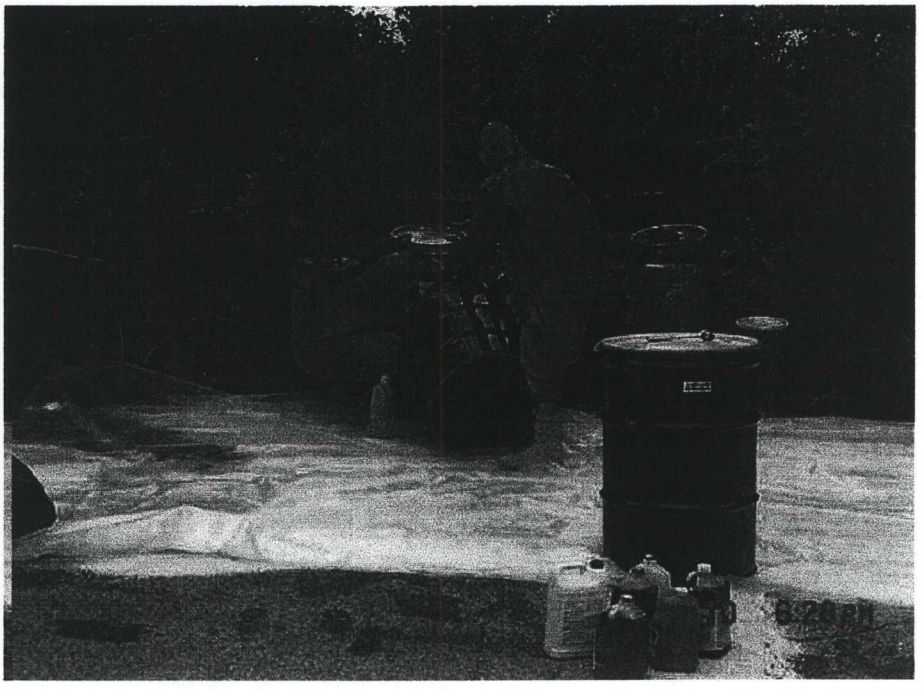


Photograph No.: 5 **Orientation:** Northeast
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: View of rusted drums

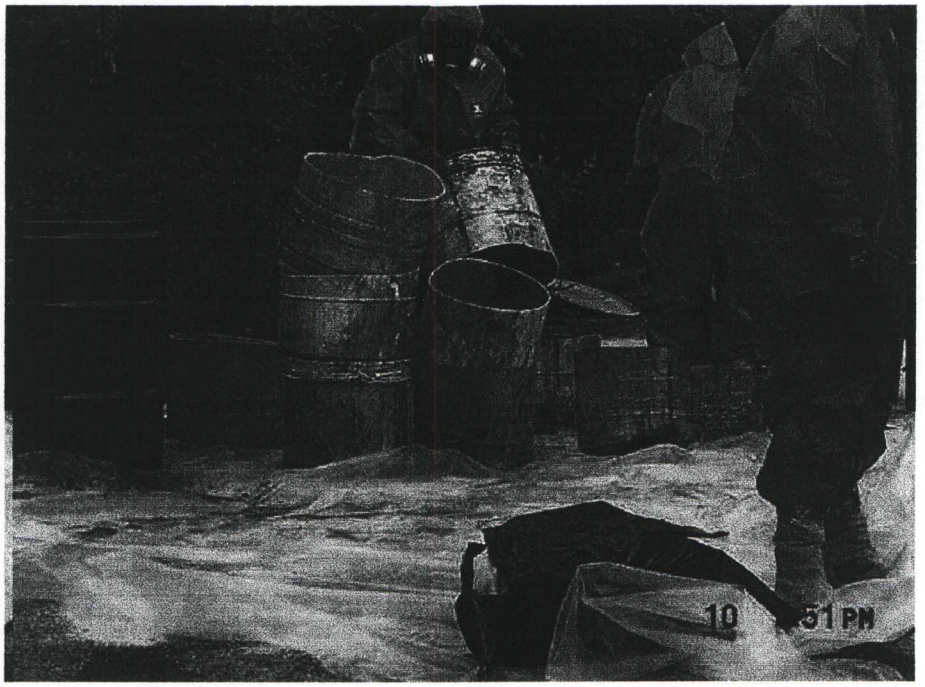


Photograph No.: 6 **Orientation:** North
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Drum and bucket monitoring for organic vapors

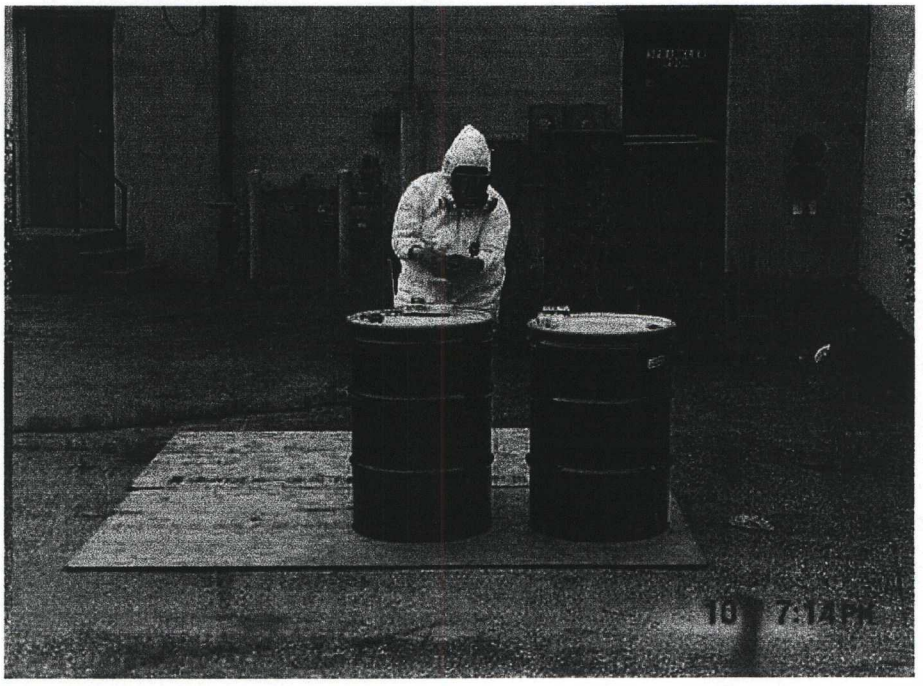
Photograph No.: 7 **Orientation:** East
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Staging area for overpacking of drums



Photograph No.: 8 **Orientation:** North
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Consolidating drum contents and overpacking drums



Photograph No.: 9 **Orientation:** Northeast
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Cutting and scrapping drums



Photograph No.: 10 **Orientation:** East
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Collecting samples for disposal analysis

Photograph No.: 11 **Orientation:** North
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Excavating stained soil

Photograph No.: 12 **Orientation:** North
TDD Number: S05-0207-005 **Date:** July 10, 2002
Location: Routes 45 & 60 Emergency Response (Mundelein Illegal Dumping) Site
Subject: Loading excavated soil into drums

APPENDIX B

VALIDATED ANALYTICAL DATA PACKAGE

(32 Sheets)

Tetra Tech EM Inc.

200 E. Randolph Drive, Suite 4700 ◆ Chicago, IL 60601 ◆ (312) 856-8700 ◆ FAX (312) 938-0118

MEMORANDUM

Date: August 9, 2002

To: Jeanine Solinski, Project Manager, TN and Associates
Superfund Technical Assessment and Response Team (START) for Region 5

From: Harry Ellis, Chemist, Tetra Tech EM Inc. (Tetra Tech) START for Region 5

Subject: Data Validation for
Illegal Dumping at Routes 60 and 45 Site
Mundelein, Illinois
Analytical Technical Direction Document (TDD) No. S05-0207-006
Project TDD No. S05-0207-005

Laboratory: Severn Trent Laboratories (STL), University Park, Illinois
Work Orders No. 210658 and 210764
Total and Toxicity Characteristic Leaching Procedure (TCLP) Volatile Organic Compound (VOC), Total and TCLP Semivolatile Organic Compound (SVOC), Organochlorine Pesticide (Pesticide), Polychlorinated Biphenyl (PCB), Total and TCLP Metal, Ignitability, Reactive Cyanide, and Reactive Sulfide Analyses of One Soil Sample and One Oil Sample

1.0 INTRODUCTION

Tetra Tech START for Region 5 validated total VOC, TCLP VOC, total SVOC, TCLP SVOC, pesticide, PCB, total metal, TCLP metal, ignitability, reactive cyanide, and reactive sulfide analytical data for one soil sample and one oil sample collected during emergency response activities conducted on July 10, 2002, at the Illegal Dumping at Routes 60 and 45 site in Mundelein, Illinois. The two samples were analyzed for different sets of parameters. The samples were analyzed under the above-referenced work orders by STL using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Methods 8260B for total VOC analysis; 1311/8260B for TCLP VOC analysis; 8270C for total SVOC analysis; 1311/8270C for TCLP SVOC analysis; 8081A for pesticide analysis; 8082 for PCB analysis; 6010B and 7471A for total metal analyses; 1311/6010B for TCLP arsenic, barium, cadmium, chromium, lead, selenium, and silver analyses;

1311/7470A for TCLP mercury analysis; 1010 for ignitability analysis; 7.3.3.2/9014 for reactive cyanide analysis; and 7.3.4.2/9034 for reactive sulfide analysis.

The data were validated in general accordance with U.S. EPA's "Contract Laboratory Program National Functional Guidelines for Organic Data Review" dated October 1999 and "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" dated February 1994. Organic data validation consisted of a review of the following quality control (QC) parameters: holding times, instrument performance checks, initial and continuing calibrations, blank results, surrogate recovery results, matrix spike and matrix spike duplicate (MS/MSD) results, laboratory control sample (LCS) results, internal standard (IS) area counts, and target compound identification and quantitation. Inorganic data validation, including validation of data from the ignitability, reactive cyanide, and reactive sulfide analyses, consisted of a review of the following QC parameters: holding times, initial and continuing calibrations, blank results, inductively coupled plasma (ICP) interference check sample results, LCS results, duplicate sample results, MS/MSD results, and sample result quantitation.

Section 2.0 discusses the results of the organic data validation, Section 3.0 discusses the results of the inorganic data validation, and Section 4.0 presents an overall assessment of the data. The attachment to this memorandum contains STL's summary of analytical results as well as START's handwritten data qualifications where warranted.

2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below in terms of the QC parameters reviewed. The data qualifiers below were applied to the sample analytical results where warranted (see the attachment).

- J - The analyte was detected. The reported numerical value is considered estimated for QC reasons.

- UJ - The analyte was not detected. The reported quantitation limit is considered estimated for QC reasons.
- R - The result is rejected. The analyte may or may not have been present.

2.1 HOLDING TIMES

The samples were analyzed within the holding time limits of (1) 14 days to TCLP extraction; (2) 14 days to analysis for VOCs; and (3) 14 days to extraction and 40 days from extraction to analysis for SVOCs, pesticides, and PCBs.

2.2 INSTRUMENT PERFORMANCE CHECKS

The bromofluorobenzene and decafluorotriphenylphosphine instrument performance checks met the QC abundance criteria for the VOC and SVOC analyses, respectively. The chromatographic resolution was adequate for the pesticide and PCB analyses.

2.3 INITIAL AND CONTINUING CALIBRATIONS

Most initial calibration results were within QC limits, exhibiting high correlation coefficients or acceptable relative standard deviations and acceptable relative response factors (RRF) as required by the various methods. In all the VOC analyses, the average RRFs for acetone and 2-butanone were below the QC limit of 0.05. Therefore, the nondetect results for these two compounds are flagged "R" to indicate that they are rejected.

The percent difference (%D) values for the continuing calibration results were acceptable for most target compounds. In the total VOC analyses, the %D values exceeded the QC limit for chloroethane, methyl-tert-butyl ether, 4-methyl-2-pentanone, and 2-hexanone. The quantitation limits for these compounds are flagged "UJ" to indicate that they are estimates. In the pesticide analyses, some compounds had

excessive %D results on the secondary (confirmation) column. All results obtained on the primary (quantitation) column were within the QC limit of 15 %D, so no qualifications are warranted.

2.4 BLANK RESULTS

During the organic analyses, method blanks were run with each analytical batch in the proper sequence. The method blanks for the VOC, SVOC, pesticide, and PCB analyses were free of target compound contamination.

2.5 SURROGATE RECOVERY RESULTS

The surrogate recoveries were within the laboratory-established QC limits in the VOC and TCLP SVOC analyses. In the total SVOC analyses, sample MDL-01 (the oil sample) exhibited recoveries below the QC limit for one surrogate; no qualifications are warranted for this minor irregularity. Also in the total SVOC analyses, sample MDS-01 (the soil sample) exhibited recoveries for two base/neutral surrogates, 2-fluorobiphenyl and nitrobenzene-d5, that exceeded their QC limits. These effects were caused by matrix interference because they were no longer seen when the extract was reanalyzed at a dilution. All positive base/neutral results for sample MDS-01, except those that were quantified in the diluted analysis, are flagged "J" to indicate that they are estimated. Affected results are those for naphthalene, diethyl phthalate, di-n-butyl phthalate, fluoranthene, pyrene, butyl benzyl phthalate, chrysene, and di-n-ocytl phthalate, but not bis(2-ethylhexyl)phthalate. In the pesticide and PCB analyses, surrogate recoveries could not be determined because of the sample dilution required by the high levels of nontarget compound matrix interference. No qualifications are warranted for these data gaps.

2.6 MS/MSD RESULTS

MS/MSD samples were analyzed during most organic analyses using sample MDL-01. No total VOC MS/MSD analyses were performed. In the TCLP VOC MS analysis (the limited amount of sample

available precluded TCLP MSD analyses) for sample MDS-01, the trichloroethene (TCE) result was not usable because the sample contained much more TCE than the spike. No qualifications are warranted for these data gaps. All other TCLP VOC MS results were within QC limits.

In the total SVOC analyses on sample MDL-01, the recoveries for 2,2'-oxybis(1-chloropropane); isophorone; and 2-methylnaphthalene were above QC limits for both the MS and MSD samples. The recoveries for bromophenyl phenyl ether and hexachlorobenzene were high for the MS sample only. The recovery for 4-nitrophenol was high for the MSD sample only. The recoveries for bis(2-ethylhexyl)phthalate were low for both the MS and MSD samples. These irregularities were all apparently caused by matrix interference from nontarget compounds. The only one of the compounds that was present in the parent sample was bis(2-ethylhexyl)phthalate; the result for that compound in the parent sample is flagged "J" as estimated. In the TCLP SVOC MS analysis on sample MDS-01, low recoveries were observed for hexachlorobutadiene (28 percent versus QC limits of 41 to 100 percent), hexachlorobenzene (39 percent versus QC limits of 50 to 113 percent), and pentachlorophenol (47 percent versus QC limits of 50 to 112 percent). These irregularities were apparently also due to matrix interference from nontarget compounds. The nondetect results for the three compounds are flagged "UJ" to indicate that the quantitation limits are estimated, biased low.

In the pesticide and PCB analyses, MS/MSD recoveries could not be determined because of the 100-fold dilution required by matrix interference from nontarget compounds. No qualifications are warranted for these data gaps.

2.7 LCS RESULTS

An LCS was analyzed with the samples in each analytical batch. In addition, an LCS duplicate was analyzed with each batch that did not include an MS analysis. The LCS results were within the QC limits specified by the laboratory except for the gamma-BHC (lindane) and aldrin results for the pesticide LCS

for sample MDL-01. These two LCS results were slightly above the QC limits, but the compounds were not found in the samples. Therefore, no qualifications are warranted.

2.8 IS AREA COUNTS

The IS area counts were within the QC limits of -50 to +100 percent of those for the calibration standard with the following exceptions: in the total SVOC analyses, area counts for the last three ISs in sample MDS-01 were below the QC limits. These ISs exhibited acceptable area counts when the sample was reanalyzed at a greater dilution. The concentration of all analytes quantitated based on the results for those three ISs (that is, 4,6-dinitro-2-methylphenol through benzo(g,h,i)perylene) from the less diluted analysis are flagged "J" or "UJ," as appropriate, to indicate that they are estimates. The retention times for the ISs were within the QC limit of ± 30 seconds. IS area counts do not apply to pesticide and PCB analyses.

2.9 TARGET COMPOUND IDENTIFICATION AND QUANTITATION

A spot-check of the chromatograms for the VOC and SVOC analyses confirmed the target compound identifications for the samples. In the total SVOC analyses, there was evidence of coeluting hydrocarbons in the mass spectra of several analytes, but no qualifications are warranted for this problem. No target compounds were detected in the pesticide or PCB analyses.

Some positive total SVOC analytical results from sample MDS-1 were above the sample detection limits but below the sample reporting limits, which correspond to the lowest calibration standards. These extrapolations are flagged "J" by the laboratory to indicate that they are estimates. A few total VOC, TCLP VOC, and total SVOC results were above the upper calibration range, but the samples were reanalyzed at a dilution that brought these results within the range. Therefore, no qualifications are warranted for these exceedances.

The high concentrations of target and nontarget compounds in the samples required that all analyses except the TCLP analyses be performed using medium- or high-level procedures, sometimes at relatively high dilutions. Therefore, the sample quantitation limits were quite high. In view of the nature of the samples, lower quantitation limits were not practical.

3.0 INORGANIC DATA VALIDATION RESULTS

The results of START's inorganic data validation are summarized below in terms of the QC parameters reviewed. The data qualifiers below were applied to the sample analytical results where warranted (see the attachment).

- J - The analyte was detected. The reported numerical value is considered estimated for QC reasons.
- U - The analyte was not detected. The reported numerical value is the sample quantitation limit.
- UJ - The analyte was not detected. The reported quantitation limit is considered estimated for QC reasons.

3.1 HOLDING TIMES

The samples were analyzed for total TCLP metals within the holding time limits of (1) 28 days for mercury, (2) 6 months for other metals, (3) 14 days for cyanide, and (4) 7 days for sulfide. There is no specified holding time for ignitability, but the analyses were performed well within the 14-day holding time for VOC, the compounds that are usually responsible for ignitability.

3.2 INITIAL AND CONTINUING CALIBRATIONS

All initial calibration results were within QC limits, exhibiting high correlation coefficients or appropriate recoveries as required by the various methods. All continuing calibration results were also within QC limits.

3.3 BLANK RESULTS

Appropriate blanks, such as initial calibration, continuing calibration, and preparation blanks, were run with each analytical batch. TCLP barium and total lead were detected in their respective preparation blanks. Therefore, the positive result for barium in the TCLP extract of sample MDS-01, which was less than five times the blank concentration, was flagged "U" to indicate that it may be a laboratory artifact. However, the total lead results were much greater than the blank concentration, so they are not qualified.

3.4 ICP INTERFERENCE CHECK SAMPLE RESULTS

ICP interference check sample analyses were performed as required. All the results were within QC limits.

3.5 LCS RESULTS

An LCS was analyzed with each analytical batch. The LCS results were within the QC limits specified by the laboratory except for reactive cyanide. The associated LCS exhibited a slightly negative recovery for reactive cyanide, whereas the laboratory QC limits were 0 to 66 percent recovery. The negative results for reactive cyanide are flagged "UJ" to indicate that the quantitation limits are estimated.

3.6 DUPLICATE SAMPLE RESULTS

Method duplicate samples were analyzed as required. All results were within QC limits.

3.7 MS/MSD RESULTS

MS/MSD samples were analyzed as required. Recoveries were within QC limits except for total mercury in the MS sample for sample MDL-01 and total lead in the MS/MSD samples for sample MDS-01. The mercury recovery was only 33 percent whereas the QC limits were 75 to 125 percent, indicating significant matrix interference. The mercury result for the parent sample is flagged "J" to indicate that it is an estimate, biased low. The lead recoveries for the MS/MSD samples were 72 and 76 percent, respectively, whereas the QC limits were 75 to 125 percent recovery. No qualifications are applied for this minor exceedance, which could be due to irregularities in the distribution of the contaminant within the soil matrix.

3.8 SAMPLE RESULT QUANTITATION

Some analytical results were above the sample detection limits but below the sample reporting limits, which correspond to the lowest calibration standards. These extrapolations, which were flagged "B" by the laboratory, have been flagged "J" to indicate that they are estimates.

4.0 OVERALL ASSESSMENT OF DATA

Overall, the sample analytical data generated by STL are acceptable for use as qualified. The most significant problems were those caused by the extremely high concentrations of organic compounds in the samples.

ATTACHMENT

STL SUMMARY OF SAMPLE ANALYTICAL RESULTS

(22 Sheets)

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8260B	Volatile Organics											
	Dichlorodifluoromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Chloromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Vinyl chloride, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Bromomethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Chloroethane, Oil	20000	U	UJ	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Trichlorofluoromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1-Dichloroethene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Carbon disulfide, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Acetone, Oil	20000	U	R	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Methylene chloride, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	trans-1,2-Dichloroethene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Methyl-tert-butyl-ether (MTBE), Oil	20000	U	UJ	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1-Dichloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	2,2-Dichloropropane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	cis-1,2-Dichloroethene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	2-Butanone (MEK), Oil	20000	U	R	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Bromochloromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Chloroform, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1,1-Trichloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1-Dichloropropene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Carbon tetrachloride, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Benzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2-Dichloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Trichloroethene, Oil	31000			20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2-Dichloropropane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Dibromomethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Bromodichloromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	cis-1,3-Dichloropropene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab

* In Description = Dry Wgt.

AUG
24 Jul 08

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	4-Methyl-2-pentanone (MIBK), Oil	20000	U	UJ	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Toluene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	trans-1,3-Dichloropropene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1,2-Trichloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Tetrachloroethene, Oil	110000000			2000000	2000000	20000	ug/Kg	56601	D1	07/11/02 1806	jab
	1,3-Dichloropropane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	2-Hexanone, Oil	20000	U	UJ	20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Dibromochloromethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2-Dibromoethane (EDB), Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Chlorobenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1,1,2-Tetrachloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Ethylbenzene, Oil	21000			20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	m&p-Xylenes, Oil	55000			40000	40000	200.0	ug/Kg	56601		07/11/02 1519	jab
	o-Xylene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Styrene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Bromoform, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Isopropylbenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	Bromobenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,1,2,2-Tetrachloroethane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2,3-Trichloropropane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	n-Propylbenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	2-Chlorotoluene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,3,5-Trimethylbenzene, Oil	83000			20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	4-Chlorotoluene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	tert-Butylbenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2,4-Trimethylbenzene, Oil	52000			20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	sec-Butylbenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	p-Isopropyltoluene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	n-Butylbenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab

* In Description = Dry Wgt.

HVG
24 Jul 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,2-Dibromo-3-chloropropane, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab
	1,2,3-Trichlorobenzene, Oil	20000	U		20000	20000	200.0	ug/Kg	56601		07/11/02 1519	jab

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8260B	Volatile Organics											
	Dichlorodifluoromethane, High/Med Level*	1100	U		130	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Chloromethane, High/Med Level*	1100	U		260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Vinyl chloride, High/Med Level*	1100	U		200	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Bromomethane, High/Med Level*	1100	U		120	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Chloroethane, High/Med Level*	1100	U	UJ	220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Trichlorofluoromethane, High/Med Level*	1100	U		220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1-Dichloroethene, High/Med Level*	1100	U		160	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Carbon disulfide, High/Med Level*	1100	U		230	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Acetone, High/Med Level*	1100	U	R	330	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Methylene chloride, High/Med Level*	1100	U		220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	trans-1,2-Dichloroethene, High/Med Level*	1100	U		150	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Methyl-tert-butyl-ether (MTBE), High/Med*Level	1100	U	UJ	340	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1-Dichloroethane, High/Med Level*	1100	U		150	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	2,2-Dichloropropane, High/Med Level*	1100	U		130	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	cis-1,2-Dichloroethene, High/Med Level*	1100	U		190	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	2-Butanone (MEK), High/Med Level*	1100	U	R	570	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Bromochloromethane, High/Med Level*	1100	U		280	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Chloroform, High/Med Level*	1100	U		200	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1,1-Trichloroethane, High/Med Level*	1100	U		190	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1-Dichloropropene, High/Med Level*	1100	U		210	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Carbon tetrachloride, High/Med Level*	1100	U		190	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Benzene, High/Med Level*	1100	U		160	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2-Dichloroethane, High/Med Level*	1100	U		240	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Trichloroethene, High/Med Level*	2600			240	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2-Dichloropropane, High/Med Level*	1100	U		200	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Dibromomethane, High/Med Level*	1100	U		250	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Bromodichloromethane, High/Med Level*	1100	U		210	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	cis-1,3-Dichloropropene, High/Med Level*	1100	U		250	1100	10.000	ug/Kg	56599		07/11/02 1423	jab

* In Description = Dry Wgt.

HVE
24 Jul 02

LABORATORY TEST RESULTS

Job Number: 210658 Date:07/12/2002

TOMER: Tetra Tech Inc. PROJECT: MUNDELEIN ABANDONED ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

ST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	4-Methyl-2-pentanone (MIBK), High/Med Lev*l	1100	U	UJ	420	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Toluene, High/Med Level*	1500			200	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	trans-1,3-Dichloropropene, High/Med Level*	1100	U		220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1,2-Trichloroethane, High/Med Level*	1100	U		350	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Tetrachloroethene, High/Med Level*	22000000			260000	1100000	10000.	ug/Kg	56599	D1	07/11/02 1738	jab
	1,3-Dichloropropane, High/Med Level*	1100	U		260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	2-Hexanone, High/Med Level*	1100	U	UJ	580	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Dibromochloromethane, High/Med Level*	1100	U		210	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2-Dibromoethane (EDB), High/Med Level*	1100	U		290	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Chlorobenzene, High/Med Level*	1100	U		250	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1,1,2-Tetrachloroethane, High/Med Level*	1100	U		290	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Ethylbenzene, High/Med Level*	3500			250	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	m&p-Xylenes, High/Med Level*	9000			560	2200	10.000	ug/Kg	56599		07/11/02 1423	jab
	o-Xylene, High/Med Level*	2100			260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Styrene, High/Med Level*	1100	U		320	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Bromoform, High/Med Level*	1100	U		200	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Isopropylbenzene, High/Med Level*	1100	U		220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	Bromobenzene, High/Med Level*	1100	U		310	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,1,2,2-Tetrachloroethane, High/Med Level*	1100	U		210	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2,3-Trichloropropane, High/Med Level*	1100	U		550	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	n-Propylbenzene, High/Med Level*	1500			310	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	2-Chlorotoluene, High/Med Level*	1100	U		460	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,3,5-Trimethylbenzene, High/Med Level*	15000			220	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	4-Chlorotoluene, High/Med Level*	1100	U		260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	tert-Butylbenzene, High/Med Level*	1100	U		150	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2,4-Trimethylbenzene, High/Med Level*	12000			260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	sec-Butylbenzene, High/Med Level*	1100	U		230	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	p-Isopropyltoluene, High/Med Level*	1100	U		260	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	n-Butylbenzene, High/Med Level*	1100	U		210	1100	10.000	ug/Kg	56599		07/11/02 1423	jab

* In Description = Dry Wgt.

HNG
24 Jul 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,2-Dibromo-3-chloropropane, High/Med Lev*l	1100	U		250	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
	1,2,3-Trichlorobenzene, High/Med Level*	1100	U		550	1100	10.000	ug/Kg	56599		07/11/02 1423	jab
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8270C	Semivolatile Organics											
	Phenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Bis(2-chloroethyl)ether, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	1,3-Dichlorobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	1,4-Dichlorobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	1,2-Dichlorobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzyl alcohol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Methylphenol (o-cresol), Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,2-oxybis (1-chloropropane), Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	n-Nitroso-di-n-propylamine, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Hexachloroethane, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Methylphenol (m/p-cresol), Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Chlorophenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Nitrobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Bis(2-chloroethoxy)methane, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	1,2,4-Trichlorobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzoic acid, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Isophorone, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4-Dimethylphenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Hexachlorobutadiene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Naphthalene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4-Dichlorophenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Chloroaniline, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4,6-Trichlorophenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4,5-Trichlorophenol, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Hexachlorocyclopentadiene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Methylnaphthalene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Nitroaniline, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Chloronaphthalene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	4-Chloro-3-methylphenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,6-Dinitrotoluene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2-Nitrophenol, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	3-Nitroaniline, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Dimethyl phthalate, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4-Dinitrophenol, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Acenaphthylene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	2,4-Dinitrotoluene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Acenaphthene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Dibenzofuran, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Nitrophenol, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Fluorene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Nitroaniline, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Bromophenyl phenyl ether, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Hexachlorobenzene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Diethyl phthalate, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4-Chlorophenyl phenyl ether, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Pentachlorophenol, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	n-Nitrosodiphenylamine, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	4,6-Dinitro-2-methylphenol, Oil	480000	U		480000	480000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Phenanthrene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Anthracene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Carbazole, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Di-n-butyl phthalate, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzidine, Oil	930000	U	Q7	930000	930000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Fluoranthene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Pyrene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Butyl benzyl phthalate, Oil	260000			93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzo(a)anthracene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr

* In Description = Dry Wgt.

HJE
24 Jul 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Chrysene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	3,3-Dichlorobenzidine, Oil	190000	U		190000	190000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Bis(2-ethylhexyl)phthalate, Oil	770000		J	93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Di-n-octyl phthalate, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzo(b)fluoranthene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzo(k)fluoranthene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzo(a)pyrene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Indeno(1,2,3-cd)pyrene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Dibenzo(a,h)anthracene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr
	Benzo(ghi)perylene, Oil	93000	U		93000	93000	1.00000	ug/Kg	56593		07/11/02 1616	glr

* In Description = Dry Wgt.

HVE
24 Jul 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb
8270C	Semivolatile Organics											
	Phenol, Solid*	1900	U		470	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Bis(2-chloroethyl)ether, Solid*	1900	U		510	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	1,3-Dichlorobenzene, Solid*	1900	U		520	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	1,4-Dichlorobenzene, Solid*	1900	U		420	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	1,2-Dichlorobenzene, Solid*	1900	U		480	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzyl alcohol, Solid*	1900	U		580	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Methylphenol (o-cresol), Solid*	1900	U		700	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,2-oxybis (1-chloropropane), Solid*	1900	U		970	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	n-Nitroso-di-n-propylamine, Solid*	1900	U		570	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Hexachloroethane, Solid*	1900	U		440	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Methylphenol (m/p-cresol), Solid*	1900	U	*	660	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Chlorophenol, Solid*	1900	U		390	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Nitrobenzene, Solid*	1900	U		350	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Bis(2-chloroethoxy)methane, Solid*	1900	U		330	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	1,2,4-Trichlorobenzene, Solid*	1900	U		280	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzoic acid, Solid*	9600	U		960	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Isophorone, Solid*	1900	U		280	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4-Dimethylphenol, Solid*	1900	U		1300	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Hexachlorobutadiene, Solid*	1900	U		390	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Naphthalene, Solid*	2600		#J	360	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4-Dichlorophenol, Solid*	1900	U		320	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Chloroaniline, Solid*	1900	U		710	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4,6-Trichlorophenol, Solid*	1900	U		380	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4,5-Trichlorophenol, Solid*	9600	U		380	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk

* In Description = Dry Wgt.

HVE
8 Aug 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Hexachlorocyclopentadiene, Solid*	1900	U		680	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Methylnaphthalene, Solid*	1900	U		1300	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Nitroaniline, Solid*	9600	U		600	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Chloronaphthalene, Solid*	1900	U		300	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Chloro-3-methylphenol, Solid*	1900	U		480	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,6-Dinitrotoluene, Solid*	1900	U		440	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2-Nitrophenol, Solid*	1900	U		430	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	3-Nitroaniline, Solid*	9600	U		780	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Dimethyl phthalate, Solid*	1900	U		420	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4-Dinitrophenol, Solid*	9600	U		1100	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Acenaphthylene, Solid*	1900	U		310	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	2,4-Dinitrotoluene, Solid*	1900	U		420	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Acenaphthene, Solid*	1900	U		300	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Dibenzofuran, Solid*	1900	U		310	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Nitrophenol, Solid*	9600	U		2100	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Fluorene, Solid*	1900	U		550	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Nitroaniline, Solid*	9600	U		760	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Bromophenyl phenyl ether, Solid*	1900	U	*	520	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Hexachlorobenzene, Solid*	1900	U		400	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Diethyl phthalate, Solid*	6000			530	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4-Chlorophenyl phenyl ether, Solid*	1900	U		490	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Pentachlorophenol, Solid*	9600	U		1000	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	n-Nitrosodiphenylamine, Solid*	1900	U		610	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	4,6-Dinitro-2-methylphenol, Solid*	9600	U		790	9600	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Phenanthrene, Solid*	1900	U		390	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Anthracene, Solid*	1900	U		410	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Carbazole, Solid*	1900	U		480	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Di-n-butyl phthalate, Solid*	8000			400	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzidine, Solid*	19000	U		11000	19000	1.00000	ug/Kg	56627		07/11/02 2008	dpk

* In Description = Dry Wgt.

HVE
8 Aug 02

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/12/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Fluoranthene, Solid*	1600	J		530	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Pyrene, Solid*	990	J		800	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Butyl benzyl phthalate, Solid*	27000			650	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzo(a)anthracene, Solid*	1900	U		300	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Chrysene, Solid*	1200	J		220	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	3,3-Dichlorobenzidine, Solid*	3800	U		640	3800	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Bis(2-ethylhexyl)phthalate, Solid*	98000			2500	7400	4.00000	ug/Kg	56627	D1	07/11/02 2110	dpk
	Di-n-octyl phthalate, Solid*	9400			1500	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzo(b)fluoranthene, Solid*	1900	U		610	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzo(k)fluoranthene, Solid*	1900	U		650	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzo(a)pyrene, Solid*	1900	U		330	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Indeno(1,2,3-cd)pyrene, Solid*	1900	U		630	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Dibenzo(a,h)anthracene, Solid*	1900	U		630	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk
	Benzo(ghi)perylene, Solid*	1900	U		850	1900	1.00000	ug/Kg	56627		07/11/02 2008	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/15/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	beta-BHC, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	delta-BHC, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	gamma-BHC (Lindane), Oil	2100	U	*	2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Heptachlor, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Aldrin, Oil	2100	U	*	2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Heptachlor epoxide, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endosulfan I, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Dieldrin, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	4,4'-DDE, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endrin, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endosulfan II, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	4,4'-DDD, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endosulfan sulfate, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	4,4'-DDT, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Methoxychlor, Oil	21000	U		21000	21000	100.000	ug/Kg	56651		07/11/02 2035	kdl
	alpha-Chlordane, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	gamma-Chlordane, Oil	2100	U		2100	2100	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Toxaphene, Oil	42000	U		42000	42000	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endrin aldehyde, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl
	Endrin ketone, Oil	4200	U		4200	4200	100.000	ug/Kg	56651		07/11/02 2035	kdl

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/15/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	91	U		18	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	beta-BHC, Solid*	91	U		16	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	delta-BHC, Solid*	91	U		12	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	gamma-BHC (Lindane), Solid*	91	U		25	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Heptachlor, Solid*	91	U		20	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Aldrin, Solid*	91	U		14	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Heptachlor epoxide, Solid*	91	U		15	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endosulfan I, Solid*	91	U		30	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Dieldrin, Solid*	190	U		37	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	4,4'-DDE, Solid*	190	U		71	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endrin, Solid*	190	U		47	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endosulfan II, Solid*	190	U		31	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	4,4'-DDD, Solid*	190	U		40	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endosulfan sulfate, Solid*	190	U		32	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	4,4'-DDT, Solid*	190	U		41	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Methoxychlor, Solid*	910	U		250	910	100.000	ug/Kg	56650		07/11/02 1854	kdl
	alpha-Chlordane, Solid*	91	U		13	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	gamma-Chlordane, Solid*	91	U		16	91	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Toxaphene, Solid*	1800	U		510	1800	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endrin aldehyde, Solid*	190	U		36	190	100.000	ug/Kg	56650		07/11/02 1854	kdl
	Endrin ketone, Solid*	190	U		32	190	100.000	ug/Kg	56650		07/11/02 1854	kdl

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/15/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8082	PCB Analysis											
	Aroclor 1016, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1221, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1232, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1242, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1248, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1254, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk
	Aroclor 1260, Oil	42000	U		42000	42000	100.000	ug/Kg	56777		07/12/02 2359	mgk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/15/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb
8082	PCB Analysis											
	Aroclor 1016, Solid*	1800	U		320	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1221, Solid*	1800	U		740	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1232, Solid*	1800	U		330	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1242, Solid*	1800	U		690	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1248, Solid*	1800	U		250	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1254, Solid*	1800	U		300	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk
	Aroclor 1260, Solid*	1800	U		270	1800	100.000	ug/Kg	56778		07/13/02 0422	mgk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658 Date:07/16/2002

CUSTOMER: Tetra Tech Inc. PROJECT: MUNDELEIN ABANDONED ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
7471A	Mercury (CVAA) Solids											
	Mercury, Oil	0.29		J	0.0054	0.033	1	mg/Kg	56594		07/11/02 1517	daj
6010B	Metals Analysis (ICAP Trace)											
	Arsenic, Oil	0.86			0.42	0.82	1	mg/Kg	56637		07/11/02 1926	tds
	Barium, Oil	9.0			0.13	0.82	1	mg/Kg	56637		07/11/02 1926	tds
	Cadmium, Oil	0.40			0.066	0.16	1	mg/Kg	56637		07/11/02 1926	tds
	Chromium, Oil	31			0.18	0.82	1	mg/Kg	56637		07/11/02 1926	tds
	Lead, Oil	15		#	0.35	0.41	1	mg/Kg	56637		07/11/02 1926	tds
	Selenium, Oil	0.38	B	J	0.33	0.82	1	mg/Kg	56637		07/11/02 1926	tds
	Silver, Oil	0.41	U		0.25	0.41	1	mg/Kg	56637		07/11/02 1926	tds

HVE
25Jul02

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/16/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	0.16			0.0061	0.037	1	mg/Kg	56594		07/11/02 1515	daj
6010B	Metals Analysis (ICAP Trace)											
	Arsenic, Solid*	5.7			0.45	0.87	1	mg/Kg	56637		07/11/02 1954	tds
	Barium, Solid*	62			0.14	0.87	1	mg/Kg	56637		07/11/02 1954	tds
	Cadmium, Solid*	0.17	U		0.070	0.17	1	mg/Kg	56637		07/11/02 1954	tds
	Chromium, Solid*	18			0.19	0.87	1	mg/Kg	56637		07/11/02 1954	tds
	Lead, Solid*	14		#	0.38	0.44	1	mg/Kg	56637		07/11/02 1954	tds
	Selenium, Solid*	0.72	B	J	0.35	0.87	1	mg/Kg	56637		07/11/02 1954	tds
	Silver, Solid*	0.44	U		0.27	0.44	1	mg/Kg	56637		07/11/02 1954	tds
7470A	Leachable, Mercury (CVAA)											
	Mercury, TCLP Leach	0.0020	U		0.0020	0.0020	1	mg/L	56683		07/12/02 1406	daj
6010B	Leachable, Metals Analysis (ICAP)											
	Arsenic, TCLP Leach	0.10	U		0.010	0.10	1	mg/L	56691		07/13/02 0015	tds
	Barium, TCLP Leach	0.36	B	U	0.010	1.0	1	mg/L	56691		07/13/02 0015	tds
	Cadmium, TCLP Leach	0.050	U		0.002	0.050	1	mg/L	56691		07/13/02 0015	tds
	Chromium, TCLP Leach	0.012	B	J	0.010	0.050	1	mg/L	56691		07/13/02 0015	tds
	Lead, TCLP Leach	0.050	U		0.0050	0.050	1	mg/L	56691		07/13/02 0015	tds
	Selenium, TCLP Leach	0.10	U		0.010	0.10	1	mg/L	56691		07/13/02 0015	tds
	Silver, TCLP Leach	0.050	U		0.005	0.050	1	mg/L	56691		07/13/02 0015	tds

HNE
26 Jul 02

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/16/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDL-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 19:15
Sample Matrix.....: Oil

Laboratory Sample ID: 210658-1
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
7.3.3.2/9014	Reactivity, Cyanide Reactivity, Cyanide, Oil	1.2	U	UJ	1.2	1.2	1	mg/Kg	56633		07/11/02 1710	rnm
1010	Ignitability (Pensky-Martens Closed-Cup) Ignitability (Flashpoint), Oil	>200					1	degrees F	56573		07/11/02 1400	jmk
7.3.4.2/9034	Reactivity, Sulfide Reactivity, Sulfide, Oil	250	U		250	250	1	mg/Kg	56587		07/11/02 1532	nrp

HOL
26 Jul 02

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210658

Date:07/16/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210658-2
Date Received.....: 07/11/2002
Time Received.....: 02:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	88.9			0.10	0.10	1	%	56577		07/11/02 1430	lmb
	% Moisture, Solid	11.1			0.10	0.10	1	%	56577		07/11/02 1430	lmb
7.3.3.2/9014	Reactivity, Cyanide											
	Reactivity, Cyanide, Solid	1.1	U	*UJ	0.76	1.1	1	mg/Kg	56633		07/11/02 1710	rnm
1010	Ignitability (Pensky-Martens Closed-Cup)											
	Ignitability (Flashpoint), Solid	>200					1	degrees F	56573		07/11/02 1030	jmk
7.3.4.2/9034	Reactivity, Sulfide											
	Reactivity, Sulfide, Solid	240	U		130	240	1	mg/Kg	56587		07/11/02 1534	nrp

HUE
26JUL02

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210764

Date:07/24/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210764-1
Date Received.....: 07/16/2002
Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8260B	Volatile Organics											
	Vinyl chloride, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	1,1-Dichloroethene, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	2-Butanone (MEK), TCLP Leach	100	~~U~~ R		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	Chloroform, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	Carbon tetrachloride, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	Benzene, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	1,2-Dichloroethane, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	Trichloroethene, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn
	Tetrachloroethene, TCLP Leach	150000			1200	5000	50.00	ug/L	57725	D1	07/23/02 1927	jdn
	Chlorobenzene, TCLP Leach	100	U		25	100	1.0000	ug/L	57725		07/23/02 1607	jdn

HVE
31Jul02

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 210764

Date:07/25/2002

CUSTOMER: Tetra Tech Inc.

PROJECT: MUNDELEIN ABANDONED

ATTN: Lisa Graczyk

Customer Sample ID: MDS-01
Date Sampled.....: 07/10/2002
Time Sampled.....: 20:15
Sample Matrix.....: Soil

Laboratory Sample ID: 210764-1
Date Received.....: 07/16/2002
Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8270C	Semivolatile Organics											
	Pyridine, TCLP Leach	200	U		200	200	1.00000	ug/L	57616		07/23/02 1043	da
	1,4-Dichlorobenzene, TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	2-Methylphenol (o-cresol), TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	Hexachloroethane, TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	4-Methylphenol (m/p-cresol), TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	Nitrobenzene, TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	Hexachlorobutadiene, TCLP Leach	100	U	UJ	100	100	1.00000	ug/L	57616		07/23/02 1043	da
	2,4,6-Trichlorophenol, TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	2,4,5-Trichlorophenol, TCLP Leach	500	U		500	500	1.00000	ug/L	57616		07/23/02 1043	da
	2,4-Dinitrotoluene, TCLP Leach	100	U		100	100	1.00000	ug/L	57616		07/23/02 1043	da
	Hexachlorobenzene, TCLP Leach	100	U	UJ	100	100	1.00000	ug/L	57616		07/23/02 1043	da
	Pentachlorophenol, TCLP Leach	500	U	UJ	500	500	1.00000	ug/L	57616		07/23/02 1043	da

HWG
31 Jul 02

* In Description = Dry Wgt.